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CLAIMS

What is claimed is:

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A CD4-specific chimeric immunoglobulin comprising an antigen binding region of non-human origin and a constant region of human origin.

- 2. A chimeric immunoglobulin of Claim 1, wherein the antigen binding region is derived from a murine anti-CD4 immunoglobulin.
- 3. A chimeric immunoglobulin of Claim 2, wherein the antigen binding region is derived from a monoclonal antibody.
 - 4. An antigen binding fragment of a chimeric immunoglobulin of Claim 1.
 - 5. A chimeric immunoglobul n comprising:
- a. at least one chimeric heavy chain comprising an antigen binding region derived from the heavy chain of a non-human immunoglobulin specific for CD4 receptor linked to at least a portion of a human heavy chain constant region, the heavy chain being in association with:
 - b. at least one chimeric light, chain comprising an antigen binding region derived
 from a light chain of the non-human immunoglobulin linked to at least a portion of a
 human light chain constant region.

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- 6. A chimeria immunoglobulin of Claim 5, wherein the antigen binding region is derived from a murine antibody.
- 7. A chimeric immunoglobulin fragment Fab, Fab' or F(ab')₂ comprising a murine variable region specific for the CD4 receptor complex and a human constant region.
 - 8. A chimeric immunoglobulin fragment of Claim 7, wherein the variable region is derived from the monoclonal antibody MT412.
 - 9. A fused gene encoding a chimeric light or heavy chain impunoglobulin comprising:
 - a. a first DNA sequence encoding an immunoglobulin variable region of a CD4 specific antibody of non-human origin linked to:
 - b. a second DNA sequence encoding a constant region of an immunoglobulin of human origin.
- 10. A fused gene of Claim 9, wherein the variable region of the immunoglobulin chain is of murine origin.
 - 11. A fused gene of Claim 10, wherein the variable region is derived from the monoclonal antibody MT412.
- 25 12. An expression vector containing the fused gene of Claim 9 in expressible form.

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A method of therapy for an autoimmune disorder, compromising administering to a patient therapeutic amounts of a chimeric immunoglobulin or immunoglobulin fragment comprising an antigen binding region of non-human origin specific for CD4 and a human constant region.

- 14. A method of claim 13, wherein the antigenbinding region is derived from murine anti-CD4 immunoglobulin.
- 10 15. A method of Claim 3, wherein the murine anti-CD4 immunoglobulin is monoclonal antibody MT412.

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